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DERWENT-WEEK: 199229
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TITLE: Activating hydrocracking catalyst for petroleum fraction - by injection of liq. charge contg. sulphur and nitrogen before addn. of feed

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PATENT-ASSIGNEE: INST FRANCAIS DU PETROLE[INSF]

PRIORITY-DATA: 1990FR-0014128 (November 12, 1990)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
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APPLICATION-DATA:

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INT-CL_(IPC): B01J037/20; C10G047/06

ABSTRACTED-PUB-NO: FR 2668951A

BASIC-ABSTRACT: A hydrocracking catalyst for a petroleum fraction is activated

by S or a S cpd., by injecting a liq. charge, distinct from the feed, onto the catalyst before treating the feed. The liq. charge is a light petroleum cut, kerosene (or jet fuel) or gas oil (or diesel), and comes from an atmos. distn. column. Activation is in situ in the hydrocracking zone, at 0.3-30 MPa, under H₂, by injecting the liq. charge at below 250 deg.C and at the same time injecting a N cpd. at below 270 deg.C; injection is esp. at 120-180 deg.C. The liq. charge is free from (di)olefins and has Br index below 5. The S for the activation originates from the liq. charge, which contains 0.1-3 wt.% of S, or an S cpd. is added; pref. S cpds. are CS₂, (di)sulphides, e.g. dimethyl (di)sulphide, colloidal S, thiophenes, mercaptans, organic polysulphides, cpds. contg. S associated with other functions, and sulphides yielding H₂S under the activation conditions.

The N cpds. include prim., sec. and tert. amines, quat, ammonium cpds., arylamines, e.g. anilines and pyrroles and homologues, pyridines, nitriles,

(thio)ureas, NH₃, nitro, nitrous and nitroso derivs., or any cpd. which is basic or can be converted to a basic cpd. During the injection of the liq. charge and the N cpd., the temp. is raised (dis)continuously to 280-400 deg.C, the temp. at which the feed is added.

ADVANTAGE - Oxides in the catalyst are sulphided and the activity of acid sites on the fresh catalyst is controlled.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:

ACTIVATE HYDROCRACKING CATALYST PETROL FRACTION INJECTION
LIQUID CHARGE CONTAIN
SULPHUR NITROGEN ADD FEED

DERWENT-CLASS: H04

CPI-CODES: H04-A07; H04-F02A; N06-E;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0349S; 1421S ; 1713S ; 1725S

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